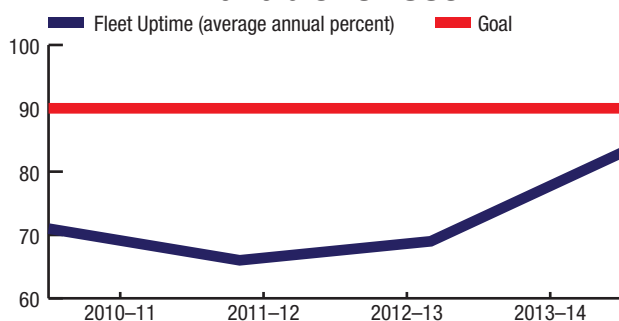


# Equipment Uptime Increases

Caltrans owns and maintains more than 12,000 pieces of equipment that we use to build and maintain California's bridges and roads. Our complex and varied fleet includes trucks, light vehicles, giant snow blowers, loaders, dump trucks, and two ferries. Our loaders and dump trucks help us fill pot holes, and our giant snow blowers allow us to keep highways open in the winter. In the case of our ferries, the equipment is the roadway. The Real McCoy II and the J-Mack ferries provide service to residents of Ryer Island and Grand Island in the Sacramento–San Joaquin Delta. If these ferries are not running, the “road” closes. To keep California's people and goods moving, equipment must be ready to use when we need it. We call this “uptime.”

## Percentage of Equipment Available for Use



Source: Division of Equipment

## Our Goal is to Have Equipment Available when Needed

Caltrans' active fleet has a total capital value of more than \$763 million, and our vehicles are used by many of our divisions, including Traffic Operations, Equipment, Maintenance, and Construction. Our goal is to have equipment available to users when they need it. This is a huge undertaking considering the number, complexity, and variety of our equipment fleet. To measure how well we are meeting our goal,

*Caltrans owns and maintains more than 12,000 pieces of equipment that we use to build and maintain California's bridges and roads.*

equipment that is operational and ready for use is measured in overall average fleet uptime. In the 2010–11 fiscal year uptime was 71 percent, with a goal to maintain a 90 percent or better uptime average. The uptime average for the 2013–14 fiscal year was 83 percent, with progressive strategies to raise the average even higher in the near future.

Staff at the Caltrans Equipment Division Headquarters Shop in Sacramento purchase, fabricate, maintain, and repair the department's fleet of more than 12,000 pieces of equipment.





## A Leaner More Efficient Equipment Division

Caltrans made significant improvements to fleet uptime by making our Equipment Division a leaner, more efficient operation. One significant change was to shift the focus of part of the Sacramento Headquarters Shop from production and assembly to repair and overhaul of major equipment such as snow blowers. This has allowed equipment repair shops across the state to concentrate on quicker repairs and service.

Our proactive approach to solicit suggestions and ideas from all levels of the organization has helped us eliminate redundancy and improve processes for leaner operations. Since September 2013, more than 100 suggestions have been made and half of those have already been implemented. We are fully committed to continuous improvement, and we involve the entire workforce so we can reduce wasteful practices and achieve our goal to increase vehicle uptime and customer satisfaction.

Modernizing the tools at our 12 main equipment shops statewide has increased staff efficiency in repairing and maintaining equipment and vehicles with computers and up-to-date diagnostic and repair tools.

We are finding innovative ways to work leaner and provide better service in all our equipment shops by reducing redundant inspections and taking advantage of extended service intervals available with newer vehicles to reduce downtime.

The next major advancement in effectively managing the Caltrans fleet is the plan to add GPS to 7,700 light-duty vehicles, off-road equipment, and selected other equipment statewide. We are scheduled to finish installing these units by the end of 2014.

In preparation for this advancement, we conducted a two-year pilot study that began July 2012, during which 200 light-duty vehicles were equipped



with GPS. The highly successful pilot had several beneficial outcomes. The study showed that GPS-equipped state-owned fleet vehicles are safer and have reduced maintenance costs. These vehicles do not require biennial smog checks, since the systems wirelessly monitor engine diagnostic information and send alerts to the appropriate equipment shop when the GPS senses potential engine problems. We can view engine status and emissions data for each vehicle in the fleet, so we can instantly identify vehicles that are out of compliance and immediately make the necessary repairs. GPS devices can track vehicle travel and storage locations and generate detailed reports about all aspects of the vehicle's use. Employees will no longer manually record information on GPS-equipped vehicles, because the system does it automatically, which will improve accuracy.

*Left: Caltrans mechanic Ernie Lopez provides critical maintenance and repairs to Caltrans equipment so it is operational when employees need it.*

*Below: Caltrans' new state-of-the-art computer-operated laser cutter cuts metal at the speed of light.*

## Fleet Asset Management

We've put greater emphasis on true fleet asset management—replacing the right equipment and vehicles at the right time. A refreshed fleet with newer equipment not only reduces the number of repairs, it also allows us to take advantage of newer technologies such as GPS. A new approach of involving equipment users in replacement decisions from the initial design through the building and purchasing process helps get the most effective equipment to the user.

Reduced downtime of Caltrans equipment ultimately benefits the motoring public. Increased availability of critical equipment, such as snow and slide removal equipment in mountain areas, traffic management vehicles in metropolitan areas, and road-patching equipment provides safer, smoother, and open roads.

By balancing the business needs for the Caltrans fleet with the needs of our employees who use our equipment, we are able to provide the right tools to do the job at the right time. The contemporary fleet business practices developed today will help Caltrans sustain and improve California's highways well into the future while being good stewards of the state's resources.

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